

## 10 Rept PCTATO 24 MAY 2001 × 2001 × 2001

## <120> HIGHLY ACTIVE FORMS OF INTERFERON REGULATORY FACTOR PROTEINS

<130> A33606-PCT-USA 071235.0111

<140> US 09/647,965

<141> 2000-10-06

<150> PCT/CA99/00314

<151> 1999-04-07

<150> CA 2,234,588

<151> 1998-04-07

<160> 11

<170> FastSEQ for Windows Version 4.0

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<211> 1284

<212> DNA

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| atg | gga | acc | cca | aag | cca | cgg | atc | ctg | ccc | tgg | ctg | gtg | tcg | cag | ctg | 48 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
| Met | Gly | Thr | Pro | Lys | Pro | Arg | Ile | Leu | Pro | Trp | Leu | Val | Ser | Gln | Leu |    |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |    |

gac ctg ggg caa ctg gag ggc gtg gcc tgg gtg aac aag agc cgc acg 96 Asp Leu Gly Gln Leu Glu Gly Val Ala Trp Val Asn Lys Ser Arg Thr 20 25 30

cgc ttc cgc atc cct tgg aag cac ggc cta cgg cag gat gca cag cag 144 Arg Phe Arg Ile Pro Trp Lys His Gly Leu Arg Gln Asp Ala Gln Gln

gag gat ttc gga atc ttc cag gcc tgg gcc gag gcc act ggt gca tat 192 Glu Asp Phe Gly Ile Phe Gln Ala Trp Ala Glu Ala Thr Gly Ala Tyr 50 55 60

gtt ccc ggg agg gat aag cca gac ctg cca acc tgg aag agg aat ttc 240
Val Pro Gly Arg Asp Lys Pro Asp Leu Pro Thr Trp Lys Arg Asn Phe
65 70 75 80

cgc tct gcc ctc aac cgc aaa gaa ggg ttg cgt tta gca gag gac cgg 288
Arg Ser Ala Leu Asn Arg Lys Glu Gly Leu Arg Leu Ala Glu Asp Arg

| _   | _   | _   |     |     | _   |     |     |     |     |     |     |     |     | aac<br>Asn        |     | 336  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------------------|-----|------|
|     |     |     |     |     |     |     |     |     |     |     |     |     |     | aat<br>Asn        |     | 384  |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     | tta<br>Leu        |     | 432  |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     | agc<br>Ser        |     | 480  |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     | agc<br>Ser<br>175 |     | 528  |
| -   |     |     |     |     |     |     |     | _   |     |     |     |     |     | cca<br>Pro        | -   | 576  |
| _   |     | _   | _   |     | _   |     | _   |     |     |     |     |     |     | aca<br>Thr        | -   | 624  |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     | ccg<br>Pro        |     | 672  |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     | cct<br>Pro        |     | 720  |
|     |     | _   |     | _   |     | _   |     |     | -   |     | _   |     | _   | agg<br>Arg<br>255 |     | 768  |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     | gga<br>Gly        |     | 816  |
| _   |     |     |     | _   |     | _   |     |     |     | -   | -   |     | _   | ggg               |     | 864  |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     | agc<br>Ser        |     | 912  |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     | gtg<br>Val        |     | 960  |
| gac | ctg | ggg | ccc | ttc | att | gta | gat | ctg | att | acc | ttc | acg | gaa | gga               | agc | 1008 |

| Asp Leu Gly Pro Phe Ile Val Asp Leu Ile Thr Phe Thr Glu Gly Ser 325 330 335  |      |
|--|------|
| gga cgc tca cca cgc tat gcc ctc tgg ttc tgt gtg ggg gag tca tgc<br>Gly Arg Ser Pro Arg Tyr Ala Leu Trp Phe Cys Val Gly Glu Ser Trp<br>340 345 350                  |      |
| ccc cag gac cag ccg tgg acc aag agg ctc gtg atg gtc aag gtt gtg<br>Pro Gln Asp Gln Pro Trp Thr Lys Arg Leu Val Met Val Lys Val Val<br>355 360 365                  |      |
| ccc acg tgc ctc agg gcc ttg gta gaa atg gcc cgg gta ggg ggt gcc<br>Pro Thr Cys Leu Arg Ala Leu Val Glu Met Ala Arg Val Gly Gly Ala<br>370 375 380                  |      |
| tcc tcc ctg gag aat act gtg gac ctg cac att gac aac gac cac cca<br>Ser Ser Leu Glu Asn Thr Val Asp Leu His Ile Asp Asn Asp His Pro<br>385 390 395 400              |      |
| ctc gac ctc gac gac gac cag tac aag gcc tac ctg cag gac ttg gtc<br>Leu Asp Leu Asp Asp Asp Gln Tyr Lys Ala Tyr Leu Gln Asp Leu Val<br>405 410 415                  |      |
| gag ggc atg gat ttc cag ggc cct ggg gag agc tga<br>Glu Gly Met Asp Phe Gln Gly Pro Gly Glu Ser *<br>420 425  | 1284 |
|  |      |
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| <211> 427<br><212> PRT   |      |
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| <pre>&lt;211&gt; 427 &lt;212&gt; PRT &lt;213&gt; Homo sapiens  &lt;400&gt; 2  Met Gly Thr Pro Lys Pro Arg Ile Leu Pro Trp Leu Val Ser Gln Leu 1</pre>              |      |
| <pre>&lt;211&gt; 427 &lt;212&gt; PRT &lt;213&gt; Homo sapiens  &lt;400&gt; 2  Met Gly Thr Pro Lys Pro Arg Ile Leu Pro Trp Leu Val Ser Gln Leu 1</pre>              |      |
| <pre>&lt;211&gt; 427 &lt;212&gt; PRT &lt;213&gt; Homo sapiens  &lt;400&gt; 2  Met Gly Thr Pro Lys Pro Arg Ile Leu Pro Trp Leu Val Ser Gln Leu 1</pre>              |      |
| <pre>&lt;211&gt; 427 &lt;212&gt; PRT &lt;213&gt; Homo sapiens  &lt;400&gt; 2 Met Gly Thr Pro Lys Pro Arg Ile Leu Pro Trp Leu Val Ser Gln Leu 1</pre>               |      |
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| <pre>&lt;211&gt; 427 &lt;212&gt; PRT &lt;213&gt; Homo sapiens  &lt;400&gt; 2  Met Gly Thr Pro Lys Pro Arg Ile Leu Pro Trp Leu Val Ser Gln Leu 1</pre>              |      |
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| <pre> &lt;211&gt; 427 &lt;212&gt; PRT &lt;213&gt; Homo sapiens  </pre> <pre> &lt;400&gt; 2 Met Gly Thr Pro Lys Pro Arg Ile Leu Pro Trp Leu Val Ser Gln Leu 1</pre> |      |

<213> Homo sapiens

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180
                                185
Lys Arg Leu Leu Val Pro Gly Glu Glu Trp Glu Phe Glu Val Thr Ala
                           200
Phe Tyr Arg Gly Arg Gln Val Phe Gln Gln Thr Ile Ser Cys Pro Glu
                        215
Gly Leu Arg Leu Val Gly Ser Glu Val Gly Asp Arg Thr Leu Pro Gly
                    230
                                        235
Trp Pro Val Thr Leu Pro Asp Pro Gly Met Ser Leu Thr Asp Arg Gly
                                   250
Val Met Ser Tyr Val Arg His Val Leu Ser Cys Leu Gly Gly Leu
           260
                               265
Ala Leu Trp Arg Ala Gly Gln Trp Leu Trp Ala Gln Arg Leu Gly His
                            280
Cys His Thr Tyr Trp Ala Val Ser Glu Glu Leu Leu Pro Asn Ser Gly
                        295
His Gly Pro Asp Gly Glu Val Pro Lys Asp Lys Glu Gly Gly Val Phe
                    310
                                        315
Asp Leu Gly Pro Phe Ile Val Asp Leu Ile Thr Phe Thr Glu Gly Ser
                325
                                    330
Gly Arg Ser Pro Arg Tyr Ala Leu Trp Phe Cys Val Gly Glu Ser Trp
                                345
Pro Gln Asp Gln Pro Trp Thr Lys Arg Leu Val Met Val Lys Val Val
                            360
Pro Thr Cys Leu Arg Ala Leu Val Glu Met Ala Arg Val Gly Gly Ala
                        375
Ser Ser Leu Glu Asn Thr Val Asp Leu His Ile Asp Asn Asp His Pro
                    390
                                        395
Leu Asp Leu Asp Asp Gln Tyr Lys Ala Tyr Leu Gln Asp Leu Val
               405
                                   410
Glu Gly Met Asp Phe Gln Gly Pro Gly Glu Ser
            420
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Ile Ser Asn Ser His Pro Leu Ser Leu Thr Ser Asp Gln
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Gly Ala Ala Ala
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| <400><br>Gly <i>I</i><br>1          |              | Ala  | Ala   | Asn<br>5 | Asn   |       |       |     |     |     |     |     |     |     |     |     |
|-------------------------------------|--------------|------|-------|----------|-------|-------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <2102<br><2112<br><2122<br><2132    | > 15<br>> DN | A    | sapie | ens      |       |       |       |     |     |     |     |     |     |     |     |     |
| <400><br>ggaaa                      |              | ga a | aaggo | 3        |       |       |       |     |     |     |     |     |     |     |     | 15  |
| <2102<br><2112<br><2122<br><2132    | > 30<br>> DN | ΙA   | sapie | ens      |       |       |       |     |     |     |     |     |     |     |     |     |
| <400<br>gate                        |              | aa q | gggaa | aacc     | ga aa | actga | aagco | 2   |     |     |     |     |     |     |     | 30  |
| <2102<br><2112<br><2122<br><2132    | > 15<br>> DN | ΙA   | sapi€ | ens      |       |       |       |     |     |     |     |     |     |     |     |     |
| <220<br><221<br><222                | > CD         |      | . (15 | 12)      |       |       |       |     |     |     |     |     |     |     |     |     |
| <4002<br>atg o<br>Met <i>I</i><br>1 | gcc          |      |       |          |       |       |       |     |     |     |     |     |     |     |     | 48  |
| tgg (<br>Trp I                      |              |      |       |          |       |       |       |     |     |     |     |     |     |     |     | 96  |
| ctg (<br>Leu <i>l</i>               |              |      |       |          |       |       |       |     |     |     |     |     |     |     |     | 144 |
| cgc a<br>Arg I                      |              |      |       |          |       |       |       |     |     |     |     |     |     |     |     | 192 |
| gtg o<br>Val <i>I</i><br>65         |              |      |       |          |       |       |       |     |     |     |     |     |     |     |     | 240 |
| ccc (<br>Pro (                      |              |      |       |          |       |       |       |     |     |     |     |     |     |     |     | 288 |
| tgc ç                               | gca          | ctg  | cgc   | agc      | acg   | cgt   | cgc   | ttc | gtg | atg | ctg | cgg | gat | aac | tcg | 336 |

| Cys | Ala | Leu | Arg<br>100 | Ser | Thr | Arg | Arg               | Phe<br>105 | Val | Met | Leu | Arg | Asp<br>110 | Asn | Ser |      |
|-----|-----|-----|------------|-----|-----|-----|-------------------|------------|-----|-----|-----|-----|------------|-----|-----|------|
|     |     |     |            |     |     |     | aag<br>Lys<br>120 |            |     |     |     |     |            |     |     | 384  |
| _   |     | _   | _          |     |     |     | acg<br>Thr        |            | _   |     |     | -   |            | _   |     | 432  |
| -   | _   | _   |            |     |     | _   | ggt<br>Gly        |            |     |     |     |     |            | _   | _   | 480  |
|     |     |     | -          |     |     |     | gcc<br>Ala        |            |     |     |     |     | _          |     | _   | 528  |
|     |     |     |            |     |     |     | ctc<br>Leu        |            |     |     |     |     |            |     |     | 576  |
| -   | _   |     | _          | _   |     |     | tca<br>Ser<br>200 |            |     | -   | _   |     | _          |     |     | 624  |
|     |     |     |            |     |     |     | gaa<br>Glu        |            |     |     |     |     |            |     |     | 672  |
|     |     |     |            |     |     |     | gct<br>Ala        |            |     |     |     |     |            |     |     | 720  |
|     |     |     |            |     |     |     | ccc<br>Pro        |            |     |     |     |     |            |     |     | 768  |
|     |     |     |            |     |     |     | ccg<br>Pro        |            |     |     |     |     |            |     |     | 816  |
|     |     |     | -          | _   | _   |     | gcg<br>Ala<br>280 |            |     |     |     | -   |            |     |     | 864  |
|     |     |     |            |     |     |     | aag<br>Lys        |            |     |     |     |     |            |     |     | 912  |
|     |     |     |            |     |     |     | ttc<br>Phe        |            |     |     |     |     |            |     |     | 960  |
|     |     |     |            |     |     |     | cag<br>Gln        |            |     |     |     |     |            |     |     | 1008 |

325 330 335

|   | _ | _          | _   | _ | _ | _    | _        |     | acg<br>Thr        | _ | _ | _ | _   |   |   | 1056 |
|---|---|------------|-----|---|---|------|----------|-----|-------------------|---|---|---|-----|---|---|------|
|   |   |            | 340 |   |   | a+ ~ |          | 345 |                   |   |   |   | 350 |   |   | 1104 |
|   |   |            |     |   |   |      |          |     | cgg<br>Arg        |   |   |   |     |   |   | 1104 |
|   |   |            |     |   |   |      |          |     | tgg<br>Trp        |   |   |   |     |   |   | 1152 |
|   |   | -          | _   |   |   |      |          | _   | tgc<br>Cys        | _ | _ |   |     |   | _ | 1200 |
| _ |   |            |     |   | - |      | _        | _   | ttc<br>Phe<br>410 |   |   |   | -   |   | _ | 1248 |
|   |   | _          |     | _ | _ | _    |          |     | cca<br>Pro        | _ |   |   |     |   | _ | 1296 |
|   |   |            | _   | _ | _ |      | -        |     | agg<br>Arg        |   | _ |   | _   | _ | _ | 1344 |
| _ | _ |            | _   | _ | _ |      |          | _   | tgc<br>Cys        | _ |   |   |     |   |   | 1392 |
| - | - | -          |     |   |   |      |          | _   | gat<br>Asp        | _ | - | - |     | _ |   | 1440 |
| - | _ |            | _   | - |   | _    |          |     | gac<br>Asp<br>490 | _ |   |   | _   |   |   | 1488 |
|   |   | ctg<br>Leu |     |   |   |      | tag<br>* |     |                   |   |   |   |     |   |   | 1512 |

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<211> 503

<212> PRT

<213> Homo sapiens

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Trp Leu Leu Gly Glu Ile Ser Ser Gly Cys Tyr Glu Gly Leu Gln Trp 20 25 30

Leu Asp Glu Ala Arg Thr Cys Phe Arg Val Pro Trp Lys His Phe Ala Arg Lys Asp Leu Ser Glu Ala Asp Ala Arg Ile Phe Lys Ala Trp Ala Val Ala Arg Gly Arg Trp Pro Pro Ser Ser Arg Gly Gly Pro Pro 75 Pro Glu Ala Glu Thr Ala Glu Arg Ala Gly Trp Lys Thr Asn Phe Arg 90 Cys Ala Leu Arg Ser Thr Arg Arg Phe Val Met Leu Arg Asp Asn Ser 105 100 Gly Asp Pro Ala Asp Pro His Lys Val Tyr Ala Leu Ser Arg Glu Leu 120 Cys Trp Arg Glu Gly Pro Gly Thr Asp Gln Thr Glu Ala Glu Ala Pro 135 140 Ala Ala Val Pro Pro Pro Gln Gly Gly Pro Pro Gly Pro Phe Leu Ala 150 155 His Thr His Ala Gly Leu Gln Ala Pro Gly Pro Leu Pro Ala Pro Ala 165 170 Gly Asp Lys Gly Asp Leu Leu Gln Ala Val Gln Gln Ser Cys Leu 185 Ala Asp His Leu Leu Thr Ala Ser Trp Gly Ala Asp Pro Val Pro Thr 200 Lys Ala Pro Gly Glu Gly Gln Glu Gly Leu Pro Leu Thr Gly Ala Cys 215 220 Ala Gly Gly Pro Gly Leu Pro Ala Gly Glu Leu Tyr Gly Trp Ala Val 230 235 Glu Thr Thr Pro Ser Pro Gly Pro Gln Pro Ala Ala Leu Thr Thr Gly 245 250 Glu Ala Ala Ala Pro Glu Ser Pro His Gln Ala Glu Pro Tyr Leu Ser 265 Pro Ser Pro Ser Ala Cys Thr Ala Val Glu Pro Ser Pro Gly Ala 280 Leu Asp Val Thr Ile Met Tyr Lys Gly Arg Thr Val Leu Gln Lys Val 295 300 Val Gly His Pro Ser Cys Thr Phe Leu Tyr Gly Pro Pro Asp Pro Ala 310 315 Val Arg Ala Thr Asp Pro Gln Gln Val Ala Phe Pro Ser Pro Ala Glu 325 330 Leu Pro Asp Gln Lys Gln Leu Arg Tyr Thr Glu Glu Leu Leu Arg His 345 Val Ala Pro Gly Leu His Leu Glu Leu Arg Gly Pro Gln Leu Trp Ala 360 Arg Arg Met Gly Lys Cys Lys Val Tyr Trp Glu Val Gly Gly Pro Pro 375 Gly Ser Ala Ser Pro Ser Thr Pro Ala Cys Leu Leu Pro Arg Asn Cys 390 395 Asp Thr Pro Ile Phe Asp Phe Arg Val Phe Phe Gln Glu Leu Val Glu 410 Phe Arg Ala Arg Gln Arg Arg Gly Ser Pro Arg Tyr Thr Ile Tyr Leu 425 Gly Phe Gly Gln Asp Leu Ser Ala Gly Arg Pro Lys Glu Lys Ser Leu 440 Val Leu Val Lys Leu Glu Pro Trp Leu Cys Arg Val His Leu Glu Gly 455 460 Thr Gln Arg Glu Gly Val Ser Ser Leu Asp Ser Ser Asp Leu Asp Leu 470 475 Cys Leu Ser Ser Ala Asn Ser Leu Tyr Asp Asp Ile Glu Cys Phe Leu

145

150

cac aca cat gct gga ctc caa gcc cca ggc ccc ctc cct gcc cca gct His Thr His Ala Gly Leu Gln Ala Pro Gly Pro Leu Pro Ala Pro Ala

485 490 495 Met Glu Leu Glu Gln Pro Ala 500 <210> 10 <211> 1629 <212> DNA <213> Homo sapiens <220> <221> CDS <222> (1)...(1629) <400> 10 atg gcc ttg gct cct gag agg gca gcc cca cgc gtg ctg ttc gga gag 48 Met Ala Leu Ala Pro Glu Arg Ala Pro Arg Val Leu Phe Gly Glu tgg ctc ctt gga gag atc agc agc ggc tgc tat gag ggg ctg cag tgg Trp Leu Leu Gly Glu Ile Ser Ser Gly Cys Tyr Glu Gly Leu Gln Trp 20 25 ctg gac gag gcc cgc acc tgt ttc cgc gtg ccc tgg aag cac ttc gcg Leu Asp Glu Ala Arg Thr Cys Phe Arg Val Pro Trp Lys His Phe Ala 35 cgc aag gac ctg agc gag gcc gac gcg cgc atc ttc aag gcc tgg gct Arg Lys Asp Leu Ser Glu Ala Asp Ala Arg Ile Phe Lys Ala Trp Ala 50 55 240 gtg gcc cgc ggc agg tgg ccg cct agc agg gga ggt ggc ccg ccc Val Ala Arg Gly Arg Trp Pro Pro Ser Ser Arg Gly Gly Pro Pro 70 75 ccc gag gct gag act gcg gag cgc gcc ggc tgg aaa acc aac ttc cgc 288 Pro Glu Ala Glu Thr Ala Glu Arg Ala Gly Trp Lys Thr Asn Phe Arg tgc gca ctg cgc agc acg cgt cgc ttc gtg atg ctg cgg gat aac tcg 336 Cys Ala Leu Arg Ser Thr Arg Arg Phe Val Met Leu Arg Asp Asn Ser ggg gac eeg gee gac eeg eac aag gtg tac geg etc age egg gag etg 384 Gly Asp Pro Ala Asp Pro His Lys Val Tyr Ala Leu Ser Arg Glu Leu 115 120 125 tgc tgg cga gaa ggc cca ggc acg gac cag act gag gca gag gcc ccc 432 Cys Trp Arg Glu Gly Pro Gly Thr Asp Gln Thr Glu Ala Glu Ala Pro 130 135 gca gct gtc cca cca cca cag ggt ggg ccc cca ggg cca ttc ttg gca 480 Ala Ala Val Pro Pro Pro Gln Gly Gly Pro Pro Gly Pro Phe Leu Ala

160

165 170 175

| ggt ga<br>Gly As        | _     |   | _ |   | _ |   | _ | _ |   |   | - | - | _ | _ | 576  |
|-------------------------|-------|---|---|---|---|---|---|---|---|---|---|---|---|---|------|
| gca ga<br>Ala As        |       |   |   |   |   |   |   |   |   |   |   |   |   |   | 624  |
| aag go<br>Lys Al<br>21  | a Pro |   |   |   |   |   |   |   |   |   |   |   |   |   | 672  |
| gct gg<br>Ala Gl<br>225 |       |   |   |   |   | - |   |   | _ |   |   |   | - | - | 720  |
| gag ac<br>Glu Th        |       |   |   |   |   |   |   |   |   |   |   |   |   |   | 768  |
| gag tt<br>Glu Le        |       |   |   |   |   |   |   |   |   |   |   |   |   |   | 816  |
| cca ag<br>Pro Se        |       | _ | _ | _ |   |   |   | _ |   | _ |   | _ |   | _ | 864  |
| ccc ag<br>Pro Se<br>29  | r Leu | _ |   |   |   |   |   |   |   | _ |   |   |   |   | 912  |
| aac co<br>Asn Pr<br>305 |       |   |   |   |   |   |   |   |   |   |   |   |   |   | 960  |
| gtg ac<br>Val Th        | _     |   |   |   |   | _ |   | - |   | _ | _ |   |   |   | 1008 |
| tgc cc<br>Cys Pr        |       |   |   |   |   |   |   |   |   |   |   |   |   |   | 1056 |
| ctg co<br>Leu Pr        |       |   |   | - |   | - |   | - |   |   | - |   | _ |   | 1104 |
| gac ag<br>Asp Ar<br>37  | g Gly |   | _ | _ |   |   |   |   |   | _ | _ |   | _ |   | 1152 |
| ggg gg<br>Gly Gl<br>385 |       |   |   |   |   |   |   |   |   |   |   |   |   |   | 1200 |

|   |   |   |       |            |   |   |   |   |   |   |   |   | ctc<br>Leu<br>415 |   | 1248 |
|---|---|---|-------|------------|---|---|---|---|---|---|---|---|-------------------|---|------|
|   | _ |   |       |            | _ |   |   | _ |   | _ | _ | _ | gaa<br>Glu        |   | 1296 |
|   |   |   |       |            |   |   |   |   |   |   |   |   | ttc<br>Phe        |   | 1344 |
| - |   | _ | <br>_ |            |   | - |   | - |   |   |   | _ | gtg<br>Val        |   | 1392 |
|   |   |   | _     | _          | _ | - |   |   | _ |   |   |   | atg<br>Met        | - | 1440 |
| _ | _ |   | _     | -          |   |   | _ | _ | _ | _ | _ | _ | cgg<br>Arg<br>495 | _ | 1488 |
|   |   |   |       |            |   |   |   |   |   |   |   |   | gac<br>Asp        |   | 1536 |
|   |   |   |       |            |   |   |   |   |   |   |   |   | ctg<br>Leu        |   | 1584 |
| _ | _ |   | <br>  | atg<br>Met | _ |   | _ |   |   |   |   | _ | tga<br>*          |   | 1629 |

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<212> PRT

<213> Homo sapiens

## <400> 11

 Met
 Ala
 Leu
 Ala
 Pro
 Glu
 Arg
 Ala
 Ala
 Pro
 Arg
 Val
 Leu
 Phe
 Gly
 Glu
 Is
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Cys Ala Leu Arg Ser Thr Arg Arg Phe Val Met Leu Arg Asp Asn Ser Gly Asp Pro Ala Asp Pro His Lys Val Tyr Ala Leu Ser Arg Glu Leu 120 Cys Trp Arg Glu Gly Pro Gly Thr Asp Gln Thr Glu Ala Glu Ala Pro 135 140 Ala Ala Val Pro Pro Pro Gln Gly Gly Pro Pro Gly Pro Phe Leu Ala 150 155 His Thr His Ala Gly Leu Gln Ala Pro Gly Pro Leu Pro Ala Pro Ala 165 170 Gly Asp Lys Gly Asp Leu Leu Gln Ala Val Gln Gln Ser Cys Leu 180 185 Ala Asp His Leu Leu Thr Ala Ser Trp Gly Ala Asp Pro Val Pro Thr 200 205 Lys Ala Pro Gly Glu Gly Gln Glu Gly Leu Pro Leu Thr Gly Ala Cys 215 Ala Gly Gly Pro Gly Leu Pro Ala Gly Glu Leu Tyr Gly Trp Ala Val 230 Glu Thr Thr Pro Ser Pro Thr Ser Asp Thr Gln Glu Asp Ile Leu Asp 245 250 Glu Leu Leu Gly Asn Met Val Leu Ala Pro Leu Pro Asp Pro Gly Pro 265 Pro Ser Leu Ala Val Ala Pro Glu Pro Cys Pro Gln Pro Leu Arg Ser 285 280 Pro Ser Leu Asp Asn Pro Thr Pro Phe Pro Asn Leu Gly Pro Ser Glu 295 300 Asn Pro Leu Lys Arg Leu Leu Val Pro Gly Glu Glu Trp Glu Phe Glu 310 315 Val Thr Ala Phe Tyr Arg Gly Arg Gln Val Phe Gln Gln Thr Ile Ser 325 330 Cys Pro Glu Gly Leu Arg Leu Val Gly Ser Glu Val Gly Asp Arg Thr 345 Leu Pro Gly Trp Pro Val Thr Leu Pro Asp Pro Gly Met Ser Leu Thr 360 Asp Arg Gly Val Met Ser Tyr Val Arg His Val Leu Ser Cys Leu Gly 375 380 Gly Gly Leu Ala Leu Trp Arg Ala Gly Gln Trp Leu Trp Ala Gln Arg 390 395 Leu Gly His Cys His Thr Tyr Trp Ala Val Ser Glu Glu Leu Leu Pro 405 410 Asn Ser Gly His Gly Pro Asp Gly Glu Val Pro Lys Asp Lys Glu Gly 425 420 Gly Val Phe Asp Leu Gly Pro Phe Ile Val Asp Leu Ile Thr Phe Thr 440 Glu Gly Ser Gly Arg Ser Pro Arg Tyr Ala Leu Trp Phe Cys Val Gly 455 460 Glu Ser Trp Pro Gln Asp Gln Pro Trp Thr Lys Arg Leu Val Met Val 475 470 Lys Val Val Pro Thr Cys Leu Arg Ala Leu Val Glu Met Ala Arg Val 490 Gly Gly Ala Ser Ser Leu Glu Asn Thr Val Asp Leu His Ile Asp Asn 505 500 Asp His Pro Leu Asp Leu Asp Asp Asp Gln Tyr Lys Ala Tyr Leu Gln 520 Asp Leu Val Glu Gly Met Asp Phe Gln Gly Pro Gly Glu Ser